

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number
WO 2005/050391 A3

- (51) International Patent Classification⁷: **G01N 33/48**
- (21) International Application Number:
PCT/US2004/038413
- (22) International Filing Date:
16 November 2004 (16.11.2004)
- (25) Filing Language:
English
- (26) Publication Language:
English
- (30) Priority Data:
60/520,819 17 November 2003 (17.11.2003) US
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
29 December 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/050391 A3

(54) Title: SYSTEM, METHOD AND SOFTWARE ARRANGEMENT UTILIZING A MULTI-STRIP PROCEDURE THAT CAN BE APPLIED TO GENE CHARACTERIZATION USING DNA-ARRAY DATA

(57) Abstract: A system, method and software arrangement are provided that use a fast adaptive multiscale procedure to characterize a random set of points spanning a high dimensional Euclidean space, and concentrated around special lower dimensional subsets. The procedure can be adapted to analyze gene expression data from microarray experiments, and may be applied generally to existing datasets without regard to whether a particular model exists to otherwise describe the dataset. The procedure accordingly can be used for identifying and mathematically isolating stable sets of data points in a given dataset from those in the same dataset that deviate from a stable model under various conditions.